

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/JP2005/004739

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 F01N9/00 F01N3/025

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 F01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 008, no. 094 (M-293), 28 April 1984 (1984-04-28) & JP 59 007720 A (MITSUBISHI JIDOSHA KOGYO KK), 14 January 1984 (1984-01-14) abstract	1-10
A	FR 2 804 718 A (PEUGEOT CITROEN AUTOMOBILES SA) 10 August 2001 (2001-08-10) abstract; figures	1-10
A	EP 1 318 289 A (RENAULT S.A.S) 11 June 2003 (2003-06-11) abstract; figures	1-10
	----- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

23 June 2005

Date of mailing of the international search report

30/06/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Blanc, S

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/JP2005/004739

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 346 (M-1437), 30 June 1993 (1993-06-30) & JP 05 044434 A (NISSAN MOTOR CO LTD), 23 February 1993 (1993-02-23) cited in the application abstract	1-10
A	----- PATENT ABSTRACTS OF JAPAN vol. 008, no. 108 (M-297), 19 May 1984 (1984-05-19) & JP 59 018222 A (TOYO KOGYO KK), 30 January 1984 (1984-01-30) abstract	1-10
A	----- DE 100 62 270 A1 (ROBERT BOSCH GMBH) 20 June 2002 (2002-06-20) abstract; figures -----	1-10

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2005/004739

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 59007720	A	14-01-1984	NONE	
FR 2804718	A	10-08-2001	FR 2804718 A1 AT 291687 T DE 60109508 D1 EP 1124042 A1	10-08-2001 15-04-2005 28-04-2005 16-08-2001
EP 1318289	A	11-06-2003	FR 2833310 A1 EP 1318289 A1	13-06-2003 11-06-2003
JP 05044434	A	23-02-1993	NONE	
JP 59018222	A	30-01-1984	JP 1807626 C JP 5006011 B	10-12-1993 25-01-1993
DE 10062270	A1	20-06-2002	WO 0248511 A2 EP 1346135 A2	20-06-2002 24-09-2003